MEVALONATE PATHWAY AND PREFERRED ENZYMES AND SEQUENCES FOR PRODUCING ISOPENTENYL PYROPHOSPHATE

STEP S—COA + S—COA	PREFERRED ENZYME	PREFERRED SEQUENCE
Acetyl-CoA Acetyl-CoA	Acetoacetyl-CoA thiolase	SEQ ID NO 1
Acetoacetyl-CoA	HMG-CoA synthase	SEQ ID NO 2
HO S—CoA HMG-CoA HMG-CoA Mevalonate	Truncated HMG-CoA reductase	SEQ ID NO 3

FIG 1A

MEVALONATE PATHWAY AND PREFERRED ENZYMES AND SEQUENCES FOR PRODUCING ISOPENTENYL PYROPHOSPHATE (CONTINUED)

<u> </u>	STEP	PREFERRED ENZYME	PREFERRED SEQUENCE	
но	OH OH			
	Mevalonate	Mevalonate kinase	SEQ ID NO 4	
но	OH OH O	н		
1	Mevalonate 5-phosphate			
	↓	Phosphomevalonate kinase	SEQ ID NO 5	
но		ОН ОН 		
Mevalonate 5-pyrophosphate				
	↓	Mevalonate pyrophosphate decarboxyl	ase SEQ ID NO 6	
	ОН О			

FIG 1B

Isopentenyl pyrophosphate

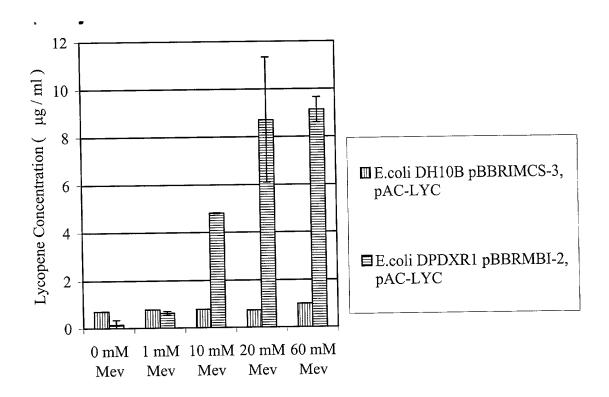


FIG. 2

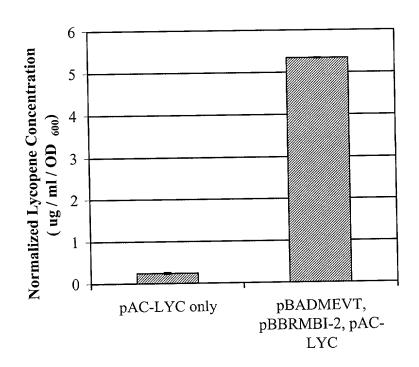


FIG. 3

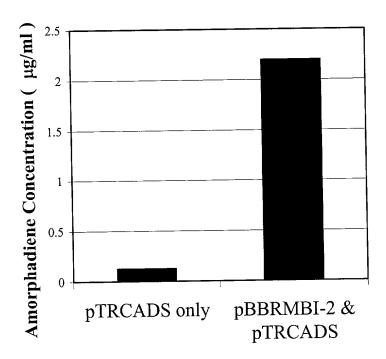


FIG. 4

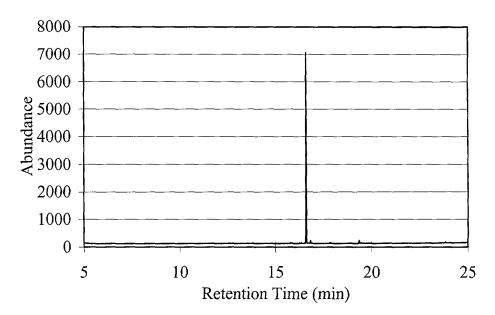


FIG. 5

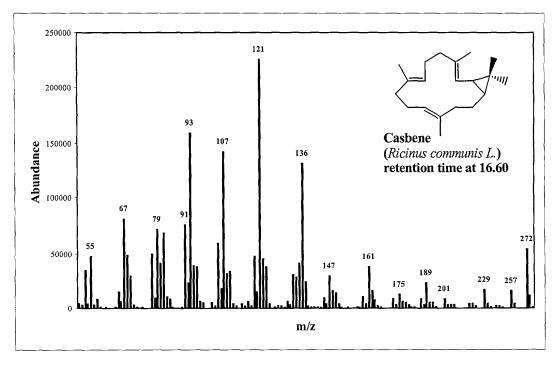


FIG. 6